

Product Description

Dycotec DM-SIP-3065S is a screen printable silver paste for use on polyimide and PET plastic substrates for general printed electronics applications.

Product Benefits

- Compatibility with polyimide substrates
- Excellent adhesion
- Good electrical conductivity

Paste Preparation

DM-SIP-3065S is a single part paste system. The paste should be gently stirred before use avoiding incorporation of air bubbles. Once the paste has been removed from the container for printing, this may introduce contamination. Please do not replace the paste in the container.

Properties of Uncured Paste

Test	Properties
Viscosity after mixing (Pa.s) (Cone & plate, 50s ⁻¹ , 20°C)	3-10
Screen residence time	Please add diluent after 6 hours if the paste has not been used to compensate for solvent evaporation losses to ensure consistent printing
Thinner	For slight adjustments in viscosity use DM-SIP-3065-DT
Coverage	150-160 cm ² /g at 10 µm print thickness
Solids Content	76-81 %
Density	~4.00 g/cm ³

Paste Printing Conditions

Parameter	Typical Properties
Substrate	Polyimide, PET
Screen	325 SS, 13 µm emulsion
Flood/Print speed	30-80 mm/s
Squeegee type	80A shore
Screen Residence Time	minimum 1 hour

Paste Processing Conditions

Parameter	Typical Properties
Thickness	10 µm
Drying Temperature	140°C
Drying Time	20 mins
Drying method	Convection oven or IR heating

Properties of Cured Paste

Test	Typical Properties
Sheet Resistance	<15 mΩ/□/mil (for polyimide), <18 mΩ/□/mil (for PET)
Volume Resistivity	<36 μΩ.cm (for polyimide), < 44 μΩ.cm (for PET)
Adhesion	5B
Resolution (L/S)	100/125 μm
Hardness	F

Clean-Up

Equipment can be cleaned using propylene glycol ether acetate.

Storage and shelf-life

For optimum results, the containers should be stored in a fridge (4°C) with lids tightly sealed. The paste shelf-life for an unopened container is 6 months from date of shipment. Please ensure the material has time to reach room temperature before use. Avoid introduction of water into the paste. Dycotec Materials cannot assume responsibility for a paste that has not been stored in appropriate conditions or where the pastes have been contaminated following use.

Safety and Handling

For safe use of this product, please review relevant material and safety datasheet (MSDS).

For more information, please contact:

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All information reported in the datasheet is for experimental work undertaken in our laboratories and illustrates typical values only. Processing conditions may vary depending on customers' experience and their application requirements and manufacturing process equipment set-up.

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